Gabriel Venegas

(520)-265-7951 | gabevenegas527@gmail.com | LinkedIn: gabe-venegas-sfwe

EDUCATION

University of Arizona, College of Science **Tucson, AZ**
Bachelor of Science Expected May 2026

- **Major:** Computer Science
- **Minor:** Software Engineering
- **GPA:** 3.6

TECHNICAL SKILLS

Languages: C, C++, Java, JavaScript, Python, Assembly (MIPS)
Java Dev: Spring MVC, Hibernate JPA, JUnit, Maven
Tools: GitHub, Docker, Jama, Enterprise Architect (UML)

PROFESSIONAL EXPERIENCE

Sion Power Corporation **Tucson, AZ**
Electrical Engineering Intern **May 2024 – Sept 2024**

- Developed medium scale projects aimed toward lithium battery cell research and validation testing of supporting proprietary hardware. Examples of projects include a CAN-bus analyzer allowing fault-injection testing of Battery Management Systems, and a cell pulse charging system enabling engineers to improve battery reliability, longevity, and safety.
- Collaborated with cross-functional teams using Agile methodology to deliver software solutions in sprints that aligned with requirements.
- Arranged meetings and presented technical projects to interdisciplinary engineering teams.
- Created comprehensive documentation for software maintainability and extensibility

PROJECTS & COURSES

Restaurant Project **Jan 2025 – May 2025**
Object Oriented Design Course

- Developed a Restaurant Point-Of-Service System in Java as part of a semester-long team project.
- Employed Agile team practices, design patterns, and standard Java frameworks to produce quality software in a timely manner.
- Built using test-driven methodology, allowing for rapid and robust backend development.

Engineers Without Borders
Vice President **Aug 2024 – Current**

- Responsible for raising funds for EWB-UA student chapter through organization of fundraising events, allowing projects to be executed and the chapter to operate.
- Additional contribution to EWB community garden project, to design, budget, and build a garden for the Esperanza en Escalante community which provides transitional housing to homeless veterans.

Wildcat Formula Racing
Electrical Team Member **Jan 2024 – May 2024**

- Programmed a custom race car dashboard in C++ using Arduino, creating an affordable $100 solution for displaying critical sensor data during operation.
- Implemented data acquisition from MoTeC ECU through CAN-bus communication protocol.
- Collaborated with cross-functional engineering students to integrate with existing vehicle systems.

Bookstore Project **Jan 2024 – May 2024**
Software Architecture Course

- Applied Spring MVC framework to build scalable applications in Java, including a semester-long bookstore project.
- Integrated ORM frameworks (Hibernate) for efficient database interactions, and message brokers (RabbitMQ) for asynchronous communication between a desktop client of the bookstore.
- Deployed containerized applications using Docker for consistent development environments.